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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,772	12/10/2001	Robert Thomas Bailis	RPS920010126US1	3353

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IBM CORPORATION
PO BOX 12195
DEPT 9CCA, BLDG 002
RESEARCH TRIANGLE PARK, NC 27709

EXAMINER	
CHANG, DANIEL D	
ART UNIT	**PAPER NUMBER**
2819	

DATE MAILED: 01/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/016,772	BAILIS ET AL.	
	Examiner	Art Unit	
	Daniel D. Chang	2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 October 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

Acknowledgement

Receipt is acknowledged of the Amendment filed October 22, 2003.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Lien et al. (US 6,211,697 B1).

Regarding claims 1-7, Lien et al. discloses, in figure 11, an ASIC comprising:

a standard cell (HA) including a plurality of logic functions (col. 4, lines 63+); a plurality of input output pins (col. 5, line 47); and at least one FPGA interconnect (see 48-56 in fig. 2) coupled to the plurality of I/O pins and the plurality of logic functions, wherein the at least one FPGA interconnect can be configured to select one of the plurality of logic functions (via lines G/2) utilizing field programming techniques (see IGs 26-34 and 58-100 in fig. 2); and wherein the one logic function is coupled to an internal bus (see 48-56 in fig. 2) via the at least one configured FPGA interconnect.

Regarding claims 8 and 9, utilizing at least one FPGA interconnect to correct wiring error which is a reversed bit order wiring error, when the ASIC is utilized on a printed circuit board, it

has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Regarding claims 10 and 11, Lien et al. discloses, in figure 9B, an ASIC comprising:

a plurality of I/O pins (col. 5, line 47);

a plurality of first logic functions (logic functions in HA 210) provided as part of a standard cell (HA 210-216);

a first FPGA interconnect (FPGA 218) coupled between the plurality of I/O pins and the plurality of first logic function, wherein the first FPGA interconnect can be configured to select at least one of the plurality of first logic functions (300 in Fig. 15 in combination with internal bus of FPGA 218, see fig. 2);

a bus (see 48-56 in Fig. 2; and 300 in Fig. 15) coupled to the plurality of first logic functions;

a second FPGA interconnect (FPGA 222) coupled between the bus and the plurality of first logic functions, wherein the second FPGA interconnect is configured to connect to one of the plurality of first logic functions to the bus (see col. 11, lines 23+); and

a plurality of second logic functions (HA 212) coupled to the bus.

Response to Arguments

Applicant's arguments filed October 22, 2003 have been fully considered but they are not persuasive.

Applicant argues, on page 7, that the FPGA interconnect can be configured to select one of the plurality of logic functions of the standard cell and there is no teaching or suggestion of such an interaction between the FPGA and HA of Lien et al. However, Figure 3 of Lien shows transistors and memory cells (e.g. 302, M88 in Fig. 15) that are selectively configured (at the time of programming) so that the FPGA interconnect (G in Fig. 15) can be configured to select one of the plurality of logic functions of the standard cell (HA 250 or 252 in Fig. 15).

As to claims 8 and 9, applicant argues, on page 7, that "there is no teaching suggestion that the FPGA can be utilized to correct a wiring error". However, since the FPGA of Lien is field programmable, when the user finds a wiring error (such as the first wire of G in Fig. 15), the user can always modify the program and use the other wire (such as the second wire of G in Fig. 15). Therefore, a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D. Chang whose telephone number is (703) 306-4549. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Tokar can be reached on (703) 305-3493. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Daniel D. Chang
Primary Examiner
Art Unit 2819

DANIEL CHANG
PRIMARY EXAMINER

DC
January 2, 2004